Writing Effectively for Medical Journals

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Topics

- Why do you need to publish?
- What is “publishable” about what you do?
- How do you identify journals for your publications?
- How do you organize your data for publication?
- Most frequently committed errors in journal submissions
- Anticipating and answering potential reviewer objections
- Increasing your likelihood of your writing being published
Reasons for publishing

- Because you have something important to say
- To change practice
- Career advancement
- To educate
- To promote thought or debate
How are articles published?

- Prepared according to structural requirements of the journal.
- Scanned by a senior editor for appropriateness; around half of articles rejected at this point.
- If appropriate mailed to two “experts” in the field—“peer review”.
- Task: Read the article carefully; should the article be accepted as it is; accepted with revisions; resubmitted after rewriting; or rejected.
- Senior editor reviews article with comments, and presents it to the editorial board.
- Most articles are rejected. NEJM accepts 10-15% of those sent out for review. JAMA and BMJ around the same. Regional journals up to 50%.
What can you publish?

Oldest cliché in academic medicine:

Write about what you do.

So, what you publish depends on what you do.

What DO you do?
Identifying journals....

- Where are other articles addressing your topic published?
- Who is your audience?
- Is it research? If so, are you sure you recognize limitations that could change where it is submitted?
- Is it clinical? Familiarize yourself with clinical journals in your specialty, or general journals like JAMA.
- If your assignment is primarily clinical, consider case reports.
Online Journals: Case Reports

- Grand Rounds
- Journal of Medical Case Reports
- Case Reports in Medicine
- Cases Journal
- BMJ Case Reports
- Radiology Case Reports
- Journal of Surgical Case Reports
This article is part of the series The importance of case reporting.

Editorial

Introducing Journal of Medical Case Reports

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The electronic version of this article is the complete one and can be found online at: http://www.imedicalcasereports.com/content/1/1/1

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Editorial

A case report provides important and detailed information about an individual, which is often lost in larger studies. Moreover, case reports can serve as an early warning signal for the adverse effects of new medications, or the presentations of new and emerging diseases. Although a number of medical journals publish case reports, these articles are underrepresented in the literature, and there has not been a journal specifically devoted to these valuable reports. Journal of Medical Case Reports fills this void. It is an online, open access journal dedicated to the publication of high quality case reports, and aims to contribute to the expansion of current medical knowledge.
Rapidly publishing key case reports describing new diseases, features of diseases and complications of treatment – in over 30 medical and surgical specialties.

1. Over 4,000 readers every month from 90 countries.
2. Online submission, rapid publication.
3. Accepted authors pay £149
4. Unlimited, free colour images.
5. Open access – read and cited freely world-wide.

"Those with interests in a wide array of complicated cases should log on to the huge database of interesting and original findings at Grand Rounds. Seasoned clinicians from different parts of the world contribute their most critical cases, and renowned referees select a particular case after much brainstorming."

- Student BMJ

Landmark Case Reports

- Read historical case reports that changed the face of medicine – with critiques and teaching points by modern experts.

- Lutina bodies by S.T.Y. Ugrader and J.E. Martin
- Wegener’s granulomatosis and multiple cranial

Latest Articles

- Single-stage subtotal colon resection in Chilaiditi syndrome: report of a case by S.N. Potarmon and S.E. Gumarinik
- Inadvertent diathermy self-injury: a cautionary tale by G.A.C. Whibley, F. Polzad and J.S....
- Does every black necrotic lesion need surgical debridement? by Mohamed Shouky, Jose De Lafunze and...
Consider Impact Factors

- Submit to the journal with the highest impact factor first.
- Impact factor = # of times articles were cited in indexed journals during a year/# of articles published in a journal.

Impact factors:
- NEJM – 53.4
- Nature – 36
- Lancet – 33.6
- Cell – 32
- Science – 31
- JAMA – 30
- BMJ – 13
- Am J Med – 5
Classic organizational structure

*FIRST: Read the Instructions for Authors very carefully*

- Abstract: structured vs. non-structured
- IMRAD
  - Introduction- why did I do it? Why was it needed? Brief synopsis of what’s gone before—and how your study redresses existing oversights or omissions. Shows the importance of the study...but keep it under 4 paragraphs.
  - Methods-what did I do? Most important! Describe subjects, selection and exclusions, statistical methods, ethical issues.
Structure

- Results- what did I find?
  - Basic descriptive data
  - Emphasis on relevance
  - Text=story, tables=evidence, figures=highlights
  - Use CI’s, not just p values
  - Clinical significance: NNT, absolute and relative risk reduction

- Discussion- what does it mean? Or “So what?”
  - Principal findings
  - Strengths and weaknesses in comparison to other studies (especially limitations)
  - Results in context of policy or change in practice
  - What’s next?
Important details

- Title (include design if possible)
- Abstract
- Minimize references; essential only
- Cover letter...short and to the point
- Authorship- consider carefully, read guidelines
- Acknowledgements, competing interests
Commonest errors in journal submission

- Wrong format or length (READ THE INSTRUCTIONS)
- Excessively long introduction
- Inadequate methods section
- A survey or questionnaire that you make up is not necessarily valid
- Clear identification of primary outcome measure
- Tables and figures that are confusing and do not stand alone
- Irrelevant material in the results that should be irrelevant in the discussion
- Making conclusions that are not borne out by the data in the abstract or discussion
- Limitations
- Limitations
- Limitations
Potential reviewer objections

- Almost all articles require revision “We are sorry....”
- Read the letter very carefully for suggestions by the editor; they are more important than what the reviewers said
- If rejected, most journals allow an appeal, but justification is needed along with revision
- If you disagree with a reviewer’s comments regarding content, style or structure, say so gently
Use Gambits to Increase Odds of Publication

- Gambits are opening moves that yield specific results
- Writing gambits = paradoxical statements that excite attention
- Attention heightens both focus and memorability
- Increase the odds of funding or publication
- Frontload these paradoxes to create a writing gambit
- Gambits also provide clear focus for organizing your research
- If at a loss to start, try to see if any conventional gambits resonate with your research.
Sample Gambits

- Mapping causal relationships between two states previously considered unrelated
- Discoveries that redress shortcomings of established methodology previously thought as immutable
- Inverse relationship between magnitude of a problem and paucity of research or insight into it
- Substantial costs attached to a problem versus dearth of methods to redress it
- Relationship between increase in focus/studies/interventions in a problem and increased problems associated with it
- Contrast between apparent simplicity of a problem and its complex structure
- Highlighting disparity between initial understanding of an issue and the light shed by subsequent research or your study
Guiding the Reader: Clarity

1. Prefer active construction to passive.
2. Place grammatical subjects as close to beginnings of sentences as possible.
3. Place verbs close to subjects. Introduce syntactic complexity after the verb.
Guiding the Reader: Clarity

4. Prefer S-V-O order.

5. Avoid *there is/there are* and other expletive constructions that invert S-V-O order.

6. Pronouns may require readers to verify antecedents, slowing down reading: avoid using them as subjects.
For Example...

- The **variations** in the microscopic sizes, **numbers and states** of polarization of neurons, the **distances and velocities** of communication, and the **strengths** of mutual excitation and mutual inhibition relative to negative feedback strength all **contribute** to the breadth of distributions and variations in the center frequencies of the mesoscopic oscillations. At rest the cortical **dynamics tends** to symmetry, in which the three types of feedback (negative, mutual excitation, mutual inhibition) are balanced, giving the power-law PSD observed in resting ECoG that contains power at all frequencies in a spectral continuum (Freeman 1975).

- *Cognitive Neurodynamics, 2009*
Guiding the Reader: Continuity

1. Link content from the end of a sentence to the content at the beginning of the next sentence to form a tight sequence.
2. Use transitions, particularly indicating relationships in time/space/causation/intention.
3. Use common grammatical subjects throughout paragraphs to trigger schemas.
Challenges to Readers

- **Thiazides** achieve their diuretic action via inhibition of the **Na\(^+\)Cl\(^-\) cotransporter (NCC)** in the renal distal convoluted tubule. The **NCC** facilitates absorption of sodium from the distal tubules back to the interstitium and accounts for about 7% of total **sodium reabsorption**. By decreasing **sodium reabsorption**, thiazides cause an increase in fluid loss to urine, which leads to decreased extracellular fluid (ECF) and **plasma volume**. This volume results in diminished venous return, increases in renin release, **reduced cardiac output**, and decreased blood pressure. Acutely, the **decrease in cardiac output** increases total peripheral resistance (TPR), which stems mostly from activation of the sympathetic nervous system (SNS) and renin-angiotensin aldosterone system (RAAS).
Guiding the Reader: Coherence

- Documents read most clearly when they contain:
  - A thesis/hypothesis sentence that contains the document’s main idea in a telegraphic form.
  - Paragraphs organized into issue/discussion/resolution format.
Guiding the Reader: Coherence

- You should always know when to break your paragraphs because:
  - A well-written paragraph always contains several head sentences that introduce the paragraphs primary focus and main points. Head sentences may run from 1-6 sentences, but should occupy no more than 1/3 of the paragraph’s length.
  - Your body delivers on the promises sketched out in the issue, developing the main points with description, analysis, examples, or evidence.
  - Your resolution or foot sums up the primary conclusions of the paragraph and anticipates the content of the next paragraph’s issue.
Challenges to Readers

- Upper extremity motor dysfunction after stroke leads to enormous functional disability, which affects quality of life and normal daily living activities like feeding, dressing, and holding delicate objects. To accomplish these upper extremity functions, skill hand movements are required. Loss of hand function accounts for about 90% loss of upper extremity function. Hand recovery after stroke often plateaus in about one year and usually upper arm functions are better than hand function after stroke. Moreover, the hand performs many functions essential to daily activities, including touching, writing, and grasping and manipulating objects.
Questions?